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Testimony of
MARK B. GLICK, Chief Energy Officer

before the
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Thursday, February 8, 2024
9:30 AM
State Capitol, Conference Room 325 and Videoconference

In Support of
HB 2020

RELATING TO RENEWABLE ENERGY.

Chair Lowen, Vice Chair Cochran, and Members of the Committee, the Hawai'i State Energy Office (HSEO) supports, with a recommended amendment, HB 2020 that modifies the definition of "renewable energy producer" in section 171-95 to allow renewable energy producers to sell to entities other than an electric utility company.

HSEO believes that (1) clarifying the definition would be helpful, and (2) the anticipated need for renewable energy extends beyond the electricity sector, since the state's decarbonization goals include the reduction in greenhouse gases from fuels used in the transportation sector, utility gas, and nonregulated fuel gases.

The statutory language, as it currently exists, is somewhat complex. The proposed revision, referencing HRS 269-91, provides welcome consistency between statutes.

HSEO recommends a slight adjustment to ensure that district cooling and sea water air conditioning are able to continue as recognized technologies eligible for these provisions, consistent with Act 205, Session Laws of Hawaii 2007. Using renewable resources to directly provide energy-efficient cooling (i.e. not having to be converted into electricity first and then into cooling) is a potentially powerful means of reducing energy imports and avoiding emissions. Since "sea-water air-conditioning district cooling" is

recognized in HRS section 269-91 as an efficiency technology, this change is consistent with the other reference to HSR section 269-91.

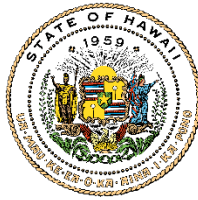
Since there are already two paragraphs, (1) and (2), a simple approach that would retain district cooling would be to add a third paragraph, as follows:

“(3) Any provider of district heating or cooling services utilizing renewable energy.”

HSEO defers to the appropriate agency on the administration of this measure.
Thank you for the opportunity to testify.

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



**STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA**

P.O. BOX 621
HONOLULU, HAWAII 96809

DAWN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

RYAN K.P. KANAKA'OLE
FIRST DEPUTY

DEAN D. UYENO
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

**Testimony of
DAWN N. S. CHANG
Chairperson**

**Before the House Committee on
ENERGY AND ENVIRONMENTAL PROTECTION**

**Thursday, February 8, 2024
9:30 AM**

State Capitol, Conference Room 325 & Videoconference

**In consideration of
HOUSE BILL 2020
RELATING TO RENEWABLE ENERGY**

House Bill 2020 proposes to amend the definition of “renewable energy producer” in section 171-95, Hawaii Revised Statutes (HRS) to allow renewable energy producers to sell to entities other than an electric utility company regulated under chapter 269, HRS. **The Department of Land and Natural Resources (Department) strongly supports this measure.**

As written, to be eligible for a directly negotiated lease under section 171-95, HRS, a renewable energy producer is required to sell all of the net power produced from the demised premises to an electric utility company regulated under chapter 269, HRS. The Department believes that this statute is outdated and in need of modernization. Evolving renewable energy technology now includes far more than electricity generated by solar panels and governing statutes should reflect that new reality. Removing the requirement that power be sold to an electric utility company would provide the Department with greater flexibility to generate revenue to support its mission by expanding the pool of potential applicants eligible for leases via direct negotiation rather than the cumbersome and costly auction process.

Mahalo for the opportunity to testify on this measure.

HB-2020

Submitted on: 2/6/2024 2:01:53 PM

Testimony for EEP on 2/8/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Kevin Moore	Department of Land and Natural Resources	Comments	Remotely Via Zoom

Comments:

Duplicate testimony from DLNR (previously submitted on another Capitol account). Request for second Zoom link for additional staff testifying remotely for HB2020.

TESTIMONY OF
LEODOLOFF R. ASUNCION, JR.
CHAIR, PUBLIC UTILITIES COMMISSION
STATE OF HAWAII

TO THE
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Thursday, February 8, 2024
9:30 a.m.

Chair Lowen, Vice Chair Cochran, and Members of the Committee:

MEASURE: H.B. No. 2020

TITLE: RELATING TO RENEWABLE ENERGY.

DESCRIPTION: Amends the definition of "renewable energy producer" in section 171-95, HRS, to allow renewable energy producers to sell to entities other than an electric utility company regulated under chapter 269, HRS.

POSITION:

The Public Utilities Commission ("Commission") offers the following comments for consideration.

COMMENTS:

The Commission appreciates the intent of this measure to expand the market for renewable energy in order to complement the State's efforts to achieve its renewable energy goals. The Commission recognizes the potential advantages of a more diverse energy market that would promote the production of clean electricity and understands that producers of renewable energy play an important role in the State's transition to renewable energy.

While this measure would serve to increase the number of allowed purchasers and provide more flexibility and options for sellers and buyers in the renewable energy market, the Commission observes that this measure creates the potential for some producers of renewable energy to seek to wheel its electricity. As the Commission commented in a related measure, H.B. No. 2098, "electricity wheeling requires analysis of many complex and interrelated issues to ensure reliability and cost-effectiveness, such as interconnection, availability of transmission and distribution capacity, appropriate rates

and rate design, back-up power requirements, and impacts on non-participating ratepayers.”

Additionally, the Commission notes that this measure would enable H.B. No. 2098, which if passed, to authorize independent generators of renewable energy to wheel the renewable electricity they produce to users of renewable energy subject to rules established by the Public Utilities Commission. As addressed in this and related measures concerning wheeling, the Commission underscores the need to carefully identify and examine the policies and procedures required to implement retail wheeling.

Thank you for the opportunity to testify on this measure.



Email: communications@ulupono.com

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
Thursday, February 8, 2024 — 9:30 a.m.

Ulupono Initiative offers comments on HB 2020, Relating to Renewable Energy.

Dear Chair Lowen and Members of the Committee:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve the quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food, renewable energy and clean transportation choices, and better management of freshwater resources.

Ulupono offers comments on HB 2020, which amends the definition of “renewable energy producer” in section 171-95, HRS, to allow renewable energy producers to sell to entities other than an electric utility company regulated under chapter 269, HRS.

While we applaud legislators’ willingness to consider all possible solutions, Ulupono shares several concerns regarding the concept of electricity wheeling as it pertains to Hawai'i as an island state and its potential implications to our electricity markets, grid stability, and overall energy policy.

The proposed amendment amounts to wheeling, and wheeling raises significant equity concerns, as it allows companies and other private entities to effectively buy up renewable energy projects (or the energy from such projects) that could otherwise, if purchased by the utility, benefit all ratepayers and the broader public interest. This is especially the case currently when utility-scale solar energy is being contracted at roughly half the cost of oil-fired electricity.

Ulupono’s concerns around electricity wheeling also stem from its potential adverse effects on our energy market, the stability of our power grid, and the overarching goals of our energy policy. The practice of wheeling in the unique context of Hawai'i's isolated island grids, which lack interconnectivity, is ill-suited. Hawai'i's distinct challenges, such as limited land availability and high land costs, further complicate the matter. Unlike in the continental United States, where competition among independent power producers across state lines can be beneficial, wheeling in Hawai'i could unintentionally lead to a reduction in affordable renewable energy options accessible to all grid-connected consumers. In real terms, the beneficiaries of wheeling would be the customers lucky enough to gain access to

Investing in a Sustainable Hawai'i

a private power agreement, at the expense of those who cannot. The customers left out of these agreements would bear an increased share of legacy costs and dwindling access to lower-cost renewable projects.

Moreover, wheeling presents intricate challenges in grid management, potentially undermining the stability and reliability of the power grid. The increased movement of electricity through different grid areas could cause congestion and complicate the real-time balancing of energy supply and demand. Retail wheeling may in fact exacerbate our energy costs by increasing grid operating costs. As noted by the National Regulatory Research Institute. “[i]f the electric transmission and distribution systems are not designed for the purpose of wheeling large and frequent quantities of power across the system, extensive use for wheeling could necessitate costly additions to the system.”¹

Although electricity wheeling is intended to encourage competition and reduce energy costs, it is crucial to contemplate its broader implications, including those on grid stability, investment in infrastructure, market equity, and the complexity of regulatory frameworks. UluPono earnestly urges the Legislature to deliberate thoroughly on these issues and to consider the potential negative repercussions of electricity wheeling on our energy markets and infrastructure. We believe collective efforts should be directed toward formulating policies that guarantee a stable, fair, and sustainable energy future for all.

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata
Director of Government Affairs

¹ *Overview of Issues Relating to the Retail Wheeling Electricity*, The National Regulatory Research Institute, May 1994, 58. <https://ipu.msu.edu/wp-content/uploads/2016/12/Costello-Overview-of-Issues-Relating-94-09-May-94-1.pdf>

HB-2020

Submitted on: 2/6/2024 12:39:39 PM

Testimony for EEP on 2/8/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Ted Bohlen	Climate Protectors Hawaii	Support	Written Testimony Only

Comments:

Support to enhance renewable power sources.



**Hawaiian
Electric**

**TESTIMONY BEFORE THE HOUSE COMMITTEE ON
ENERGY & ENVIRONMENTAL PROTECTION**

HB 2020

Relating to Renewable Energy

Tuesday, February 8, 2024

9:30 am

State Capitol, Conference Room 325 & Videoconference

James Abraham
Associate General Counsel
Hawaiian Electric

Dear Chair Lowen, Vice Chair Cochran, and Members of the Committee,

My name is James Abraham and I am testifying on behalf of Hawaiian Electric offering comments on HB 2020, Relating to Renewable Energy.

The purpose of HB 2020 is “to allow renewable energy producers to sell to entities other than the electric utility,” which is also known as “wheeling” of electricity. Hawaiian Electric supports programs that aid renewable energy by enabling customers to use their renewable energy systems more effectively; however, the utility also recognizes the importance of equity and ensuring that the benefits of wheeling are balanced with any additional costs or burdens that may be placed on non-wheeling customers. Regulatory policies must take into account these considerations and establish policy and technical requirements that minimize cost shifting and consider the impacts on non-wheeling customers.

Hawaiian Electric agrees with the Public Utilities Commission’s suggestion of opening a new investigatory docket to explore whether implementing wheeling in Hawaii is feasible and in the public interest. Specifically, we believe that such a docket should examine intragovernmental wheeling as an initial step to consider the appropriate balance

of interests and priorities and address among other things risk of potential significant cost and equity impacts to non-wheeling customers. Such a docket would allow the Public Utilities Commission, the Consumer Advocate, Hawaiian Electric and other stakeholders to establish a foundation for a balanced wheeling model which could be used to develop similar programs for a wider range of customer-participants.

In order to effectively balance many important objectives and produce sustainable success in Hawaii's unique renewable energy environment, a wheeling program must be designed to consider and address the following key principles:

- **Promote customer choice by increasing options.** We seek collaboration to establish and coordinate specific services between utilities and customers needed to lower bills, increase renewable energy, and energy efficiency.
- **Safety is paramount.** Operating an electric grid is complex and should be the responsibility of the utility without undue interference to ensure public safety and the safety of utility crews.
- **Reliability of the electric system.** The reliability and resilience of the public utility's electric grid must not be compromised.
- **Aiding renewable energy.** Wheeling programs should be designed and implemented to help increase the use of renewable energy for the benefit of the whole community, not just the few who can afford it.
- **Cohesion with existing renewable laws.** A new wheeling model in Hawaii must recognize existing laws, such as the utilities' 100% renewable portfolio standard, and ensure that wheeling does not interfere with or defeat these goals.
- **Equity.** Burden on other customers should be balanced with the benefits, including the opportunity cost for non-wheeling customers. Regulatory policies must minimize cost shifting, along with establishing other policy and technical requirements.
- **Avoid unintended consequences.** Hawaii's regulatory framework is sophisticated and intended to serve many state and customer objectives. In fostering achievement of certain objectives, care must be applied to avoid unintentionally undermining other priority objectives.

Hawaiian Electric has strong concerns about the feasibility of addressing and balancing the above key principles in a full retail wheeling model and believes that a reasonable first step would involve the PUC's examination of intragovernmental wheeling, which may have less impacts on non-participants and the community. Enabling full retail wheeling could potentially exacerbate financial and geographic equity issues by encouraging the construction of renewable energy projects on one part of the island to supply power exclusively to customers on another part of the island, using Hawaiian Electric's transmission and distribution system to connect them. Even assuming the Company is compensated for use of its infrastructure for the benefit of some customers, this arrangement could shift costs to customers who do not benefit from wheeling arrangements yet must still pay to maintain the grid. It could also aggravate community concerns that have emerged around the siting of renewable energy projects, especially if the benefits accrue only to end users located miles away. The Public Utilities Commission is currently investigating these and other energy equity issues in Docket No. 2022-0250, but the concepts being discussed in that proceeding do not include wheeling or the unregulated private energy producers who fall under the new definition found in this bill.

We welcome continued discussion of how wheeling concepts can be adapted to fit the realities of the Hawaii energy system, with the understanding that the Company must play a primary role in structuring such wheeling transactions to ensure safety, reliability, and financial equity. Indeed, technology and the energy market have evolved to the point where Hawaiian Electric now enables customers to enjoy many of the benefits of wheeling through existing programs such as shared solar and the Microgrid Services Tariff. We must address the State's energy future as a whole and be cautious

not to simply adopt mainland solutions ill-fit for Hawaii, especially those used in larger grids with large manufacturing and commercial loads.

Hawaiian Electric appreciates the Committee's consideration of its comments on HB 2020. Thank you for this opportunity to testify.

HB-2020

Submitted on: 1/31/2024 7:33:34 PM

Testimony for EEP on 2/8/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Justin Silva	Individual	Support	Written Testimony Only

Comments:

Accordingly, the purpose of this Act is to repeal the constraints of section 171-95, Hawaii Revised Statutes, and the narrow definition of “renewable energy producer”, to allow renewable energy producers to sell to entities other than the electric utility, in furtherance of the State’s renewable energy goals

HB-2020

Submitted on: 1/31/2024 8:27:35 PM

Testimony for EEP on 2/8/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Beth Anderson	Individual	Support	Written Testimony Only

Comments:

There are too many limits on who can provide green energy. The protections for HECO and their profits is getting in the way of the most important goal—to reach 100% renewable energy.

There are also too many limits on purchasing your own battery systems or more panels without HECO's permission. HECO controls what you can purchase and what you can get permitted to hook into their system. They delay and deny permits and they have way too much power.

All of it is too limiting and there needs to be more affordable options in order for consumers to reach energy independence. Especially when we are dependent on an unreliable energy source—HECO. They fail to update their grids, transformers, maintain their equipment yet keep raising their rates and gouging the consumer then give their Board members huge bonuses. For what?

Thank you for considering my views and opening up more energy options so we can all have affordable, reliable green energy sources and reach 100% green energy to mitigate climate change and have a cleaner environment.

Statement of
Brigadier General Stanley J. Osserman Jr. (USAF Ret.), President
Tigershark, LLC
Before the
House Committee on Energy & Environmental Protection
8 February 2024
9:30 am
State Capitol Conference Room #325
In consideration of
HB2020
Relating to Renewable Energy

Chair Lowen

31 January 2024

Vice Chair Cochran and Distinguished Committee Members:

I stand in strong support to this bill.

As the former director of the Hawaii Center for Advanced Transportation Technologies (HCATT; 2013 to 2019), Hawaii Department of Business, Economic Development and Tourism (DBEDT), my HCATT Director position was designated by the legislature as the “Hydrogen Implementation Coordinator for the State of Hawaii”. I continue to serve our state by promoting clean, renewable energy solutions. This testimony is NOT being given for compensation of any kind, commercial, political or private. I am presenting to you today as a concerned “Life-Long” citizen of the State of Hawaii with extensive professional experience in energy systems, retail and wholesale business, military matters, international commerce, aviation, construction, maritime operations, and public safety, among others. My goal is to help our government leaders make good strategic choices.

Hawaii has fallen behind on actionable solutions to eliminate the undesirable fallout from fossil fuels, I feel that HB 2020 is an important and necessary step to getting our state back on track by making more options available to make, store and use a broader range of clean, sustainable energy sources! I’m looking forward to HB 2020 making it through “cross-over” and getting signed by Governor Greene!

Brigadier General, Stanley J. Osserman Jr. (USAF Ret.)

President, Tigershark, LLC

HB-2020

Submitted on: 2/6/2024 3:44:13 PM

Testimony for EEP on 2/8/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Ruta Jordans	Individual	Support	Written Testimony Only

Comments:

Please support.